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amendments, since the description of the invention in the specification is correct, with the inaccuracies resulting from the way the claims were worded rather than the description of the invention.

**2. *Objection and Rejection Under 35 USC 112, First Paragraph***

The specification was objected to because it did not adequately describe that the speed of the stroke increases at the reversing positions and decreases at the side positions. As the Examiner correctly noted, the specification described the stroke speed as accelerating from positions B to A and decelerating from positions A to D, etc., which meant that the speed increase at the reversing position and decrease at the side position was not supported by the specification.

In response, claim 2 has been amended to recite that the stroke speed increases as the spool approaches a reversing position (e.g., from position B to A) and decreases as the spool approaches a position approximately midway between the reversing positions (positions A to D). This corrected recitation is in fact accurate and is clearly shown in both the drawing figures and the accompanying description.

Thus, it is respectfully submitted that the amendment overcomes the objection under 35 USC 112, first paragraph, and the corresponding rejection under the same paragraph, and it is requested that both the objection and rejection be indicated as being overcome.

**3. *Rejection Under 35 USC 112, Second Paragraph***

A. Claim 2, line 6 (originally line 5) has been amended to include the word "of," which was inadvertently omitted in the previous response.

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B. The phrase "actuates the spindle member" has been changed to --causes the spindle member to also move to and fro parallelly to the longitudinal axis-- (lines 6-7). This change is made in response to the Examiner's objection to the word "actuates."

C. The spindle member has now been recited as being "connected to the spool" in line 3 of claim 2. It is respectfully submitted that this is sufficiently definite to comply with 35 USC 112, second paragraph. If the Examiner wishes, means for connecting the spindle member to the spool could be added, but this would not change the meaning or scope of the claim in any way, and would simply make a lengthy claim lengthier. The claim does not read on a spindle member not connected to a spool, and thus it is not seen how the addition of "means" for connecting the spindle member to the spool could possibly make the claim more definite. The point is that the spindle member is connected to the spool, that the spindle member moves, and that the spool moves, all in response to movement of the cam drive.

D. The crank drive has now been positively recited in line 2 of claim 2, in response to the Examiner's objection to the "inferential" recitation in original line 8.

E. The cam stud has now been recited as being eccentrically mounted on the gear (line 11) in response to the objection to original line 9.

F. In line 8 of the amended claim, the guide slot is positively recited as including sidewalls, thereby overcoming the objection to the inferential recitation of the sidewalls in line 10 of original claim 2.

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G. The phrase "means for winding the fishing line on the spool" has been added to line 2 in response to the Examiner's comments in the first paragraph on page 4 of the Official Action that the claims are vague because they do not include such "means."

H. Finally, in claim 2, the "side positions" has been changed to --position approximately midway between the reversing positions--(line 22), which more accurately describes these positions, in response to the requirement in the last sentence on page 3 of the Official Action.

I. The objection to "said longitudinal direction" in claim 3, line 5 has been addressed by amending claim 2 to positively recite the longitudinal direction, and the recitation of a center line has been changed to a recitation of a line through the slot whose direction coincides with the direction of the displacement of the guide slot.

J. Claim 6 has been amended to positively rather than inferentially set forth the arcuate zone.

K. The angle recitation in claim 9 has been deleted, and claim 9 has further been amended to make clear the purpose of the feature recited therein, which is to increase the stroke distance for the spool.

**4. *Rejection Under 35 USC 103***

This new rejection is respectfully traversed.

The Hitachi reference describes a device in a completely different and non-analogous field from that of the present invention or that of Morishita, namely a thread guide for a textile machine, and it would not have been obvious under any

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circumstances to combine the fishing reel of Morishita with the textile machine of Hitachi to obtain the claimed fishing reel. As previously noted, textile wefts and warps are not cast and reeled in during weaving, and therefore one of ordinary skill in the art would not look to textile machines for solutions to problems involving casting and reeling in of a fishing line.

Hitachi, furthermore, involves winding of a thread onto a rotating spool. This point was not made in the previous response, but is important because not only is the Hitachi device from a non-analogous art, but the structure is completely different. In a fishing reel of the type shown in Morishita, and also in the claimed device, the spool reciprocates but does not rotate to guide the line on the spool. The problems involved in winding a line onto a reciprocating spool are entirely different than those involved in winding a line onto a rotating spool.

Hitachi discloses an elongated cam which can run in the direction of excursion. The invention on the other hand discloses an elongated S-cam which is substantially perpendicular to the direction of excursion. While it is true that a guide channel perpendicular to the direction of excursion of the spool is shown in Morishita, if the Hitachi elongated guide channel were applied in Morishita transversely to the direction of excursion, then the resulting elongated guide channel would be far too long to be housed in the fishing reel. The eccentric cam would no longer reach as far as the end of the guide channel and the desired effect could not be achieved. Rather, the eccentric cam would move to and fro only centrally in the Hitachi guide channel, without achieving the effect of the invention.

In order to size the Hitachi control channel or guide channel so that it could be housed in Morishita when its length is perpendicular to the direction of excursion would require an additional step for which there is no support or

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motivation in either of the two references. As a whole, three steps would be needed to combine Hitachi with Morishita to arrive at the present invention:

1. The conceptual transfer from the domain of textile machinery to a fishing reel;
2. The conceptual rotation by 90° of the Hitachi guide curve from a position in the direction of excursion to a position perpendicular to the direction of excursion;
3. The "compression" or "squashing" of the Hitachi guide channel or guide curve until it could be housed in a relatively compact fishing reel.

It is respectfully submitted that there is no motivation for any of the three steps, and that the combination is therefore improper.

**4. Finality of Office Action**

It is respectfully noted that the new rejection based on Morishita in view of Hitachi was not necessitated by any amendments to overcome the original rejection, since the only changes made in the first response were the combination of claims 1 and 2, and various amendments to overcome § 112 problem. Therefore, it is respectfully requested either that the finality of the previous Office Action be withdrawn.

**5. Interview**

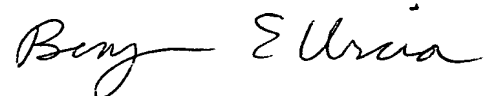
Finally, the Examiner is thanked for her careful consideration of the case and the courtesy extended during an interview with the undersigned at her office on December 6, 1993. During the interview, the Examiner raised several complex new issues which will need to be discussed with the Applicants before a complete response thereto can be given. At the very least, therefore, Applicant respectfully requests that the above amendments be entered and, if the case is not deemed

Interview record  
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allowable, that a new Official Action be issued so that the new issues can be made of record and fully developed.

*Respectfully Submitted,*

A handwritten signature in cursive script, appearing to read "Benz E Urcia".

**BENJAMIN E. URCIA**

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**Date: December 8, 1993**

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APPENDIX A

Sub 01  
2. (Twice Amended) In a fishing reel which includes a spool for receiving a fishing line, means for winding the fishing line on the spool, a crank drive, a cam drive, and a spindle member connected to the spool, the spool having a longitudinal axis and being displaced to and fro parallelly to the longitudinal axis between reversing positions of the spool at which a direction of displacement of the spool reverses by means of the cam drive which [actuates] causes the spindle member to also move to and fro parallelly to the longitudinal axis [connected to the spool], the cam drive including a guide part having a guide slot which includes sidewalls, said guide part being connected to the spindle member, [and] a gear rotated by [a] said crank drive [of the fishing reel], [said gear comprising] a cam stud, and means for eccentrically mounting the cam stud on the gear to rotate in a circular path about an axis of rotation, said stud entering the guide slot and sliding along said sidewalls of the slot to displace said guide part and therefore the spool in the direction parallel to the longitudinal axis, the improvement wherein the guide slot has an elongated S shape, said cam drive forming drive means for causing the cam stud to be approximately midway between end zones of the S when the spool is at [the] said reversing positions of the spool and in one of the end zones of the S when the spool is at [side positions] a position approximately midway between said reversing positions, wherein a line connecting said end zones of the S subtends a nonzero angle with respect to the direction of displacement of the guide part, and wherein [during a transition] as the spool is moved from one reversing position to a [next side] position approximately midway between said reversing positions, and from [the next side] said position approximately midway between said reversing positions to a next reversing position, said drive means causes said cam stud to impart to the guide part continuously changing stroke speeds as a result of the shape of the guide slot and displacement of the cam stud, said sidewalls also forming means for causing the stroke speed to increase [at the] as the spool approaches one of the reversing [positions] position, and [decreasing at the side

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positions] for causing the stroke speed to decrease as the spool approaches the position approximately midway between the reversing positions.

C' 3. (Twice Amended) An improvement as claimed in claim 2, wherein segments of the sidewalls in which the cam stud is located before reversal of the spool displacement direction are spaced farther from a [center] line through the slot whose direction coincides with the direction of displacement of the guide part and which is transverse to said longitudinal direction than are segments of the sidewalls in which the cam stud is located substantially at the side positions.

C 2 3. (Twice Amended) An improvement as claimed in claim 1/2, wherein the guide slot has arcuate zones and said arcuate zones of the guide slot and the circular path of the cam stud are incongruent.

C 3 6. (Amended) An improvement as claimed in claim 1/2, wherein [an angle] a curvature of the sidewall of the guide slot is such that [the] a stroke distance of the spool is larger than a stroke distance moved by the cam stud [in the direction of travel between two reversing points on the sidewall] [slot] in the direction of spool movement.

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